



Department of Defense Legacy Resource Management Program

Project 10-086

National Public Lands Day

Tracey P. Adams and Jessica Harig

December 22, 2010

**DEPARTMENT OF DEFENSE
LEGACY RESOURCE MANAGEMENT PROGRAM (10-086)**

National Public Lands Day 2010

The Department of Defense provides funds to the National Environmental Education Foundation (NEEF) for National Public Lands Day (NPLD) projects on military lands open to the public for recreation. Since 1999, National Public Lands Day has received \$1,484,395.60 through the Legacy Resource Management Program. In 2010, National Public Lands Day received a total of \$236,823 from Legacy. Of this amount, \$200,224 was allocated to sites and one site received \$500.00 in carryover funding from 2009. For 2010 NPLD projects, a total of \$200,724 was distributed to installations for materials and supplies. The Legacy funds were used to improve Department of Defense (DoD) lands through various natural and cultural resource improvement activities.

The National Environmental Education Foundation received 52 applications for Legacy awards of up to \$6,500 each for 2010 NPLD projects. In August and September, NEEF notified the 48 sites selected to receive Legacy Resource Management Program awards and began the process of reimbursing DoD sites for materials purchased to complete NPLD projects. The branches awarded with Legacy Resource Management Program funding consisted of eight Air Force, 15 Army, 12 Army/Air National Guard, two Marine Corps and 11 Navy sites.

On September 25, 2010, 170,000 volunteers participated at over 2,080 NPLD sites to improve parks and other public lands in all 50 states, the District of Columbia and many U.S. territories. NPLD volunteers contributed an estimated \$15 million in public land improvements by removing 450 tons of trash; collecting 20,000 lbs of invasive plants; building and maintaining 1,320 miles of trails; and planting 100,000 trees, shrubs and other native plants. Many NPLD events included an environmental or natural resource education component to teach volunteers about land stewardship.

In 2010, NPLD volunteers focused on promoting the health benefits of outdoor recreation. After volunteering, site managers encouraged participants to explore and enjoy America's natural wonders, by taking a hike, a swim or a bike ride and getting healthy in America's backyard.

Of the more than 170,000 NPLD volunteers, approximately 1,900 of these individuals took part in various natural and cultural resource improvement activities offered at the 48 DoD Legacy Resource Management Program sites. Many Legacy sites organized work projects to improve habitat for pollinator species including bees, birds, bats and insects. Other natural resource activities performed by volunteers included removing trash and invasive plants; restoring rivers and streams; enhancing wetlands, dune and coastal habitats; constructing trails and bridges; planting native trees, shrubs, wildflowers and other vegetation.

The cultural resource activities included repairing historic structures and monuments as well as installing interpretive and educational signage. These activities included volunteers restoring the Buffalo Soldier Monument at Fort Bliss in Texas and maintaining historic military cemeteries at Tyndall Air Force Base in Florida. Site managers educated the public about the military lands' cultural artifacts as well as the environmental and natural resources issues surrounding the area.

Legacy Sites in 2010

<u>United States Air Force</u>	<u>Amount Awarded</u>
Beale Air Force Base California	\$2,785.00
Cape Canaveral Air Force Station/Patrick Air Force Base Florida	\$5,971.00
Fairchild Air Force Base Washington	\$5,750.00
Lackland Air Force Base Texas	\$6,350.00
Malmstrom Air Force Base Montana	\$5,744.00
Randolph Air Force Base/Airman's Heritage Park Texas	\$3,245.00
Shaw Air Force Base/Poinsett Electronic Combat Range South Carolina	\$6,500.00
Tyndall Air Force Base Florida	\$4,575.00
<u>United States Army</u>	
Blue Grass Army Depot Kentucky	\$6,500.00
Fort Belvoir Virginia	\$725.47
Fort Bliss Texas	\$1,807.18
Fort Drum New York	\$3,270.00
Fort Lewis, Halverson Creek Washington	\$6,424.00
Fort Richardson Alaska (after 10/1/2010 renamed Joint Base Elmendorf-Richardson)	\$5,000.00
Fort Stewart Georgia	\$2,275.00
Fort Wainwright Alaska	\$4,405.90
Joint Base Langley Eustis Virginia	\$4,693.90
Joint Base Lewis McChord Yakima Training Center Washington	\$6,500.00
Joint Expeditionary Base Fort Story/Historic Villages on Cape Henry Virginia	\$4,254.08
Pahipahialua/Kahuku Training Area Hawaii	\$1,360.00
Pohakuloa Training Area/Keamuku Parcel Hawaii	\$3,129.04
Redstone Arsenal Alabama	\$3,462.50
Umatilla Chemical Depot Oregon	\$6,500.00

<u>United States Army/Air National Guard</u>	<u>Amount Awarded</u>
Arden Hills Army Training Site Minnesota	\$1,200.00
Biak Training Center Oregon	\$3,500.00
Camp Dawson Army Training Site West Virginia	\$6,463.90
Camp McCain Training Center Mississippi	\$6,100.00
Camp Murray Washington	\$3,977.48
Camp Navajo Arizona	\$6,493.68
Fort Custer Training Center Michigan	\$3,500.00
Fort Indiantown Gap Pennsylvania	\$5,000.00
Fort McClellan Alabama	\$6,500.00
Fort Pickett Virginia	\$6,450.00
McCrary Training Center South Carolina	\$3,140.00
State Military Reservation New Hampshire	\$1,625.39
<u>United States Marine Corps</u>	
Marine Corps Air Ground Combat Center, 29 Palms California	\$6,500.00
Marine Corps Air Station Cherry Point North Carolina	\$3,000.00
<u>United States Navy</u>	
Joint Base Pearl Harbor-Hickam Hawaii	\$5,000.00
Joint Expeditionary Base Little Creek Virginia	\$3,645.00
NASO Dam Neck Annex Virginia	\$4,760.00
Naval Air Weapons Station China Lake California	\$770.00
Naval Air Weapons Station Key West Florida	\$3,500.00
Naval Submarine Base New London Connecticut	\$750.00
Naval Support Activity Norfolk Northwest Annex Virginia	\$3,000.00
Naval Weapons Station Yorktown Virginia	\$1,125.00
Naval Weapons Station Seal Beach California	\$4,500.00
Naval Weapons Station Seal Beach Detachment Fallbrook California	\$2,000.00*
NIOC Sugar Grove West Virginia	\$6,496.48

*Awarded an additional \$500.00 using FY2009 carryover.

United States Air Force



Beale Air Force Base | California Natural Resource Project: Site Cleanup, Planting and Trail Restoration

Pollinator Project

Project Date: September 25, 2010

Project Summary: Forty volunteers, including Cub Scouts, worked for three hours at Beale Air Force Base on a variety of enhancement projects. The participants planted 15 native trees, added 30 native plants, restored one mile of trail, installed steps to permit better creek access and removed 150 pounds of litter. Prior to the event, an education session detailed the importance of riparian areas.

Contact: Chuck Carroll, Natural Resources Manager | (530) 634-2738

Cape Canaveral Air Force Station/Patrick Air Force Base | Florida Natural Resource Project: Invasive Species Removal, Pollinator Habitat Restoration and Mangrove Planting

Pollinator Project

Project Date: October 26, 2010; December 2010

Project Summary: The NPLD project at Cape Canaveral Air Force Station was divided into two parts; one event occurred on October 26 and the second took place in December. During the October event, volunteers removed invasive Brazilian pepper plants and planted over 500 native mangroves. Mangroves provide additional shoreline protection, sediment stabilization, serve as a nursery habitat for birds and marine life, improve aesthetics and assist with water-quality maintenance. Volunteers from the Air Force, SpecPro and the Marine Resource Council assisted with the October restoration efforts.

The December project involved planting native wildflower seeds. December is the optimal time to plant wildflowers because invasive Bahia grass lies dormant during winter. Bahia grows rapidly and must be mowed frequently to impede it from choking native plants. Reseeding the area with native wildflowers will reduce the amount of mowing needed in the area to less than four times annually. Once the native wildflower seeds sprout, they will provide additional habitat for pollinator species such as bees, birds, bats and insects.

Contact: Don George and Teresa Fiorillo, Natural Resource Managers | (321) 853-6518

Fairchild Air Force Base | Washington

Natural Resource Project: Invasive Species Removal and Native Tree Planting

Project Date: September 25, 2010

Project Summary: Twenty volunteers weeded a one-quarter acre section of Fairchild Air Force Base that was infested with invasive species. In the past, this area required frequent mowing to prevent the invasive species from choking out the native vegetation and disrupting the fragile ecosystem. After removing the invasive species, the group planted 36 native trees. Before beginning the work, volunteers were given a project overview that detailed the benefits of native trees and consequences of non-native plants.

Contact: Jonathan Wald, Natural Resource Manager | (509) 247-8207

Lackland Air Force Base | Texas

Natural Resource Project: Native Species Habitat Maintenance

Pollinator Project

Project Date: December 18, 2010

Project Summary: Along a 40 acre section of Lackland Air Force Base, 15 volunteers spread native wildflower seeds and installed purple martin birdhouses to promote nesting and yearly migration return. The purple martin's primary food source is insects and a consistent annual bird population keeps the bug population under control. The birds and their habitats are also used in the Base's conservation education programs.

Contact: Jason Rose, Restoration Program Manager | (210) 671-5305

Malmstrom Air Force Base | Montana

Natural Resource Project: Site Maintenance

Pollinator Project

Project Date: September 25, 2010; November 2010; May or June 2011.

Project Summary: On September 25, four projects were completed at Malmstrom Air Force Base. Volunteers prepared a butterfly garden, removed t-posts from an abandoned field, cleared tire debris from a deactivated all-terrain vehicle training course and assembled bird boxes. This work was accomplished by Girl Scouts, Boy Scouts and active duty volunteers.

Each group worked on one of the four projects. Girl Scout Junior Troop 3135 prepared the Medal of Honor Memorial Park butterfly garden site by removing rocks, digging a bedding area for plants and adding soil, compost, weed barrier and river rock. Five active duty volunteers removed and recycled 40 t-posts. Four of the posts were re-furbished and were later used to stabilize newly planted cottonwood trees. The remaining 36 t-posts were assembled into bird houses by a troop of 25 Cub Scouts. The Scouts also removed 40 pounds of debris at the Base's Pow Wow Park. During these projects, the Cub Scouts were introduced to the Base's wetland ecosystems and learned about migratory birds from a local environmental educator.



Girl Scouts prepare the Medal of Honor Memorial Park butterfly garden site.

Malmstrom also held a volunteer event during the first week of November, when participants established a new pond area windbreak using mature cottonwood trees. Before the cold winter weather arrived, the cottonwoods were rooted into the ground and any leaning trees were stabilized with the recycled t-posts.

The timeline for installing 24 tons of rip rap along the shoreline was delayed due to erosion control measures, implemented as part of a necessary upgrade to the Pow Wow Pond walking trail. This portion of the project will be completed in May or June of 2011.

Contact: Jason Gibbons, Chief, Conservation Program | (406) 731-6333

Randolph Air Force Base/Airman's Heritage Park | Texas **Natural Resource Project: Wildflower Seeding, Bird Seeding and Tree Planting**

Project Date: October 25, 2010

Project Summary: Randolph Field is a Historic Landmark District containing 346 buildings listed on the National Register of Historic Places. Fifteen NPLD volunteers from various Base departments worked for two hours to enhance the Base's Airman's Heritage Park. Volunteers planted rye grass, added Monterey oak and crepe myrtle trees and spread bird seed. The rye grass provided top cover for the park area and reduced soil erosion from winds. Monterey oak trees will replace the Live oak species being attacked by a disease known as oak wilt. The Monterey oak is not susceptible to the disease, which has no cure and can destroy a 100 year old tree in six months. The wild bird seed will provide food for migrating birds during their journey northward in the upcoming spring.

Contact: Phillip W. Rieger, Natural Resources Manager | (210) 652-7131

Shaw Air Force Base/Poinsett Electronic Combat Range | South Carolina **Natural Resource Project: Cultural Resource Maintenance**

Project Date: September 24, 2010

Project Summary: Activities related to a combat mission changed the date of this event at the last minute from September 25 to September 24. This rescheduling reduced the amount of volunteers from 35 to ten. Due to the smaller group the project scope was limited to landscaping the historic house on Base. For eight hours, volunteers added gravel to repair an access road, mulched the garden and removed sixty pounds of litter.

Over the past five years, much of the house's restoration has been accomplished by NPLD volunteers. Each year the group is informed of the house's historical background and the volunteers are filled with enthusiasm upon seeing how the projects have enhanced this structure.

Contact: David Z. Davis, Cultural Resource Program Manager/ Wildlife Biologist | (803) 895-5325

Tyndall Air Force Base | Florida **Natural Resource Project: Cultural Resource Maintenance**

Project Date: March 2011

Project Summary: In March volunteers at Tyndall Air Force Base will repair the fencing on four of its nine historic cemeteries. Wooden split rail fences will replace the deteriorating chain fences, which do not endure the elements as well as wooden fencing. The work will consist of digging postholes, setting posts, nailing boards in place and constructing the tables/benches. Two of the oldest cemeteries on base will benefit from these repairs. Volunteers will also remove debris and trim hanging tree limbs in and around the cemeteries.

This project will extend over four work days and involve members of the local community, Boy Scouts, area schools and Base personnel. Tyndall Air Force Base's commitment to refurbish this area will enhance their relationship with local residents, many of whom have relatives buried in the cemeteries. Discussions of the cultural and historical significance of the cemeteries will encourage volunteers to take a look beyond what exists today and learn more about the history of the base.

Contact: Wendy Jones, Wildlife Biologist | (850) 283-2822

United States Army



Blue Grass Army Depot | Kentucky Natural Resource Project: Ecological/Historical Trail Construction

Project Date: April 22, 2011

Project Summary: Blue Grass Army Depot site managers plan to construct a self-guided ecological/historical interpretive trail. The service project area falls within the U.S. Civil War Battle of Richmond (1862) Historic Areas, which are listed on the National Register of Historic Places. The trail will consist of a single use walking trail with ecological and historical interpretive signage. Items added to the trail, will include an information kiosk and a wildlife observation blind. This project will help to highlight the natural beauty and historic importance of the region, as well as illustrate the importance of maintaining public lands.

Blue Grass Army Depot has successfully developed a partnership with the Battle of Richmond Association, Madison County and the Madison County Historical Society to preserve and enhance public understanding of the Battle of Richmond. Their members, along with individuals from Eastern Kentucky University, Kentucky Department of Fish and Wildlife Resources and area high schools will participate in the Blue Grass Army Depot projects.

Contact: Nathan M. White, Archaeologist/Cultural Resource Manager | (859) 779-6651

Fort Belvoir | Virginia Natural Resource Project: Trail and Signage Maintenance

Project Date: September 25, 2010

Project Summary: On National Public Lands Day, Fort Belvoir volunteers rehabilitated the Fairfax Ruins and Potomac View trails. This work included planting native wildflower vegetation, mulching trails and constructing native bee boxes.

Forty five individuals, more than anticipated, worked on one or more of the projects. Volunteers included, Quantico Young Marines, Girl Scouts Brownie Troop 1889, the Naval Chaplains Office, Northrop Grumman, Fort Belvoir Civilian & Contractor and the local



A volunteer rakes around a newly scrubbed sign.

communities. The high unexpected volunteer turnout can be partially attributed to a series of articles written for the local newspaper, *The Belvoir Eagle*. The newspaper posted articles in advance of the NPLD event to bring greater awareness to the community of both the existence of the trails and the need for volunteers.

The projects transformed both sections of Fort Belvoir. Twenty signs are now clear that previously were soiled and difficult to read. Girl Scouts added a species of butterfly plants, specifically chosen for their ability to attract large numbers of pollinators. These plants also accentuate the signage beside a trail entrance. Enhancements to the trails involved painting benches and mulching sections of a closed eroded trail, now open to the public. While accomplishing these projects, group leaders discussed the historical significance of the project and how it benefited the ecosystem.

The volunteers were pleased with the day's results and 15 indicated they would like to be notified of future events. As a result of these responses, the project manager is developing future projects for Fort Belvoir.

Contact: Wilamena Harback, Natural Resources Specialist | (703) 806-3758

Fort Bliss | Texas

Cultural Resource Project: Monument Restoration

Project Date: September 25, 2010; October 1, 2010; October 9, 2010

Project Summary: For NPLD, Fort Bliss volunteers enhanced their deteriorating Buffalo Soldier Monument. This monument, erected on February 5, 1999, showed signs of premature corrosion and lacked a conservation plan. New Mexico State University museum conservation students conducted an assessment of the monument on September 25, 2010 and performed conservation work on October 9, 2010.

The monument was wax treated to remove the light green corrosion patches from several spots and a metal inhibitor was applied to areas that showed active corrosion. These efforts are critical, as the monument is a teaching tool used to relay the story of the "Buffalo Soldiers" at Fort Bliss. The monument also honors the generation of Buffalo Soldiers and African American soldiers who served there.

Additionally, a ceremony giving recognition to NPLD and kicking off the Oasis beautification campaign was held on October 1. It was hosted by Commanding General, Major General Pittard. Six students from Hughley Elementary School also helped with landscaping efforts during this event and were presented with volunteer certificates.

Contact: Martha Yduarte, Curator/Archaeologist | (915) 568-7015

Fort Drum | New York

Natural Resource Project: Litter and Invasive Species Removal

Project Date: September 25, 2010.

Project Summary: On September 25, eleven volunteers cleared vegetation from various areas, maintained six existing angling sites and created one new angling site. With increased accessibility, the new and updated angling areas will enhance Fort Drum's recreational fishing opportunities and be a place for individuals to spend time recreating outside.

Contact: Raymond E. Rainbolt, Fish and Wildlife Program Manager | (315) 772-9636

Fort Lewis, Halverson Creek | Washington **Natural Resource Project: Native Species Habitat Maintenance** **and Invasive Species Removal**

Pollinator Project

Project Date: September 21, 2010

Project Summary: At Fort Lewis 15 volunteers removed invasive species, cut brush, planted native vegetation to enhance a Pacific salmon habitat and removed woody debris. Later, volunteers used the woody debris to stabilize the waters around Halverson Creek. Species of invasive vegetation removed included Himalayan blackberry, Reed canary grass and Scot's broom.

Participants also constructed and installed nest boxes for western bluebirds, wood ducks, saw-whet owls, northern pygmy owls, purple martins and bats. The bat structures had been previously built by the Stafford Creek Corrections Center. The bat boxes will provide homes for the 11 different bat species found on Fort Lewis, all of which are at risk of being listed for protection under the Endangered Species Act.

Project volunteers were from various groups including The Nature Conservancy and Boy Scouts of America. Fort Lewis biologists at the event provided volunteers with information about how the work projects would benefit each species.

Contact: Dave Clouse, Fish and Wildlife Program Manager | (253) 967-3474

Fort Richardson | Alaska **Cultural Resource Project: Repair Damaged Structure and Remove Litter** *(as of October 1, 2010, renamed Joint Base Elmendorf-Richardson)*

Project Date: June 2011

Project Summary: In June 2011, Fort Richardson will hold a two day event to clean up debris at the Site Summit Historic District. Site Summit is a Nike missile site and the only historic district on Fort Richardson. The structure is also listed on the Register of Historic Places for its Cold War significance. This project was scheduled to occur in early September, but weather conditions delayed the event until June.

The Site Summit Historic District litter removal will be on top of a mountain near popular state park land. Approximately 30 volunteers will clear debris from the site, clean non-historic graffiti from building exteriors and stabilize existing buildings. The Fort Richardson community, the Friends of Nike Site Summit and university students will be targeted for volunteer recruitment. Volunteers will learn about basic standards for preserving a historic property and improve an important component of Fort Richardson's history.

Contact: Jon Scudder, Cultural Resources Manager | (907) 552-4157

Fort Stewart | Georgia **Cultural Resource Project: Cemetery and Grave Marker Maintenance**

Project Date: September 25, 2010

Project Summary: Fort Stewart site managers organized an event to clean grave markers in two pre-military cemeteries. Volunteers were educated on proper gravestone cleaning techniques. The group also removed invasive vegetation that was encroaching on the cemeteries.

Contact: Amanda Hinesley, Public Relations | (912) 767-4459

Fort Wainwright | Alaska

Cultural Resource Project: Repair Historic Structure and Landscaping

Project Date: April or May 2011

Project Summary: In the spring site managers from Fort Wainwright will lead volunteer projects to restore fire damage incurred on the North Post Chapel. The structure is a part of the Ladd Field War World II National Historic Landmark District. Approximately 30 volunteers will repair the interior of the chapel and remove any damaged non-historic fixtures like the carpet and wainscoting. While accomplishing these projects, volunteers will be educated about the basic standards for working on historic property. A non-historic exterior sign will also be removed and minor yard work will be done to the surrounding area.

Contact: Lisa Graham, Cultural Resources Manager | (907) 361-3002

Joint Base Langley Eustis | Virginia

Cultural Resource Project: Develop an Interpretive Trail

Project Date: October 24, 2010

Project Summary: Joint Base Langley Eustis site managers developed an interpretive heritage trail within the Fort Crafford section of the Base. Fort Crafford is best known as a Civil War fortification, but also has archaeological remains of an eighteenth century home and an early seventeenth century settlement. The constructed heritage trail provides an overview of significant aspects of the Civil War and many archeological resources.

Staff from the Eustis archaeology program along with volunteers from Boy Scout Troop 43 and the Fort Eustis Historical and Archaeological Association worked on this project. Upon completion, there was a discussion on the history of Fort Crafford and volunteers received a tour of their meeting location—the eighteenth century Matthew Jones House. This NPLD project showcased the Base's history and increased visitation to the area, which is a long term goal for the Joint Base Langley Eustis cultural resources program.

Contact: Christopher L. McDaid, Cultural Resources Manager | (757) 878-4123 x295

Joint Base Lewis McChord Yakima Training Center | Washington

Natural Resource Project: Plant Native Vegetation and Collect Seed

Pollinator Project

Project Date: September 25, 2010; March 2011

Project Summary: The Joint Base Lewis McChord Yakima Training Center project, originally scheduled as a single day event, was divided into two parts—the first part occurred on September 25 and the other will occur in the spring of 2011. During the first event, 23 volunteers planted 750 native trees or shrubs, seeded 3 acres with native plant seed, propagated 600 riparian shrub cuttings and collected 10 pounds of native seed from 15 species of rare flowering plants.

In the spring, there will be additional propagation of previously collected native plant seed. Volunteers will also construct stouling beds, propagation tables and an interpretive sign frame. Individuals from the September event and an additional Boy Scout troop indicated they will assist with the spring activities.

Contact: Colin Leingang, Wildlife Program Manager | (509) 577-3860

Joint Expeditionary Base Fort Story/Historic Villages on Cape Henry | Virginia Cultural Resource Project: Dune Habitat Maintenance

Pollinator Project

Project Date: February 12, 2011

Project Summary: On February 12, 2011 the First Landing Foundation and members of the Joint Expeditionary Base Fort Story (JEBFS) natural resources staff will lead an event to restore two secondary dune areas. The group will plant native coastal vegetation, add signs describing key features of the maritime dune habitat and repair a public walkway. Volunteers will be recruited from many areas of the community, such as local schools, JEBFS military personnel, area environmental groups and Native American tribes.

This project is part of ongoing efforts to educate the public about the history of the Tidewater Region, which includes three miles of coastline along Cape Henry's historic interpretive areas. Local natural resource experts will provide instructional programs relaying the importance of the local maritime dune habitat, area history and traditional as well as current uses of the ecosystem.

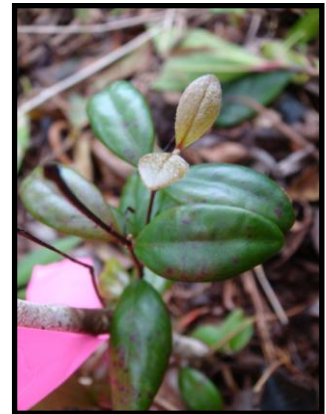
Contact: Collette Amici, CEO First Landing Foundation | (757) 417-7012

Pahipahialua/Kahuku Training Area | Hawaii Natural Resource Project: Invasive Species Removal and Native Species Planting

Project Date: September 25, 2010

Project Summary: On September 25, seven volunteers worked for two hours to remove invasive strawberry guava and koster's curse from a steep hillside in Pahipahialua Forest. The weeds were encroaching on a population of endangered Hawaiian Nioi plants. After volunteers had cleared away the weeds, they were excited to discover several Nioi seedlings. After weeding, volunteers transplanted 33 native plants from a high impact area exposed to ungulates into a protected freshly weeded area.

The volunteer group was smaller than anticipated due to an illness that affected many people on the island, forcing several individuals to cancel. Those able to volunteer were very enthusiastic and hardworking. Each participant received hand-outs highlighting the endangered species they would be working to protect. The hand-outs also included photos of the invasive weeds being targeted for removal and descriptions of the native plants to be added. Discussions about these species were also given during the hike to the work area.



Native endangered Nioi was one of species planted in Pahipahialua Forest.

Contact: Kimberly Welch, Environmental Outreach Specialist | (808) 656-7741

Pohakuloa Training Area/Keamuku Parcel | Hawaii Natural Resource Project: Habitat Maintenance

Project Date: September, 25, 2010; Spring 2011

Project Summary: For the second consecutive year, Pohakuloa Training Area/Keamuku Parcel was awarded Legacy funding to construct a fence that, upon completion, will enclose a series of gulches. These gulches harbor a remnant patch of tropical montane cloud forest, which is the habitat for the native Amakihi.

During the spring of 2011, volunteers will construct the fencing over the course of several months, as groups become available. Area schools and a local group, The Big Island Bird Hunters, will aid with the fence



Volunteers work to protect a tropical montane cloud forest.

construction. Many of the students have not previously worked in a cloud forest, so this activity will provide a special learning experience to those who make the journey to this site.

On September 25, the site hosted six volunteers that planted 117 native trees, shrubs, herbs and ferns. The vegetation was purchased without using 2010 Legacy funds, as the site planned to participate in NPLD regardless of the Award outcome.

Contact: Dr. Peter Peshut, Biologist/Program Manager; Dave Faucette, Project Manager | (808) 969-1966; (808) 935-0424

Redstone Arsenal | Alabama Natural Resource Project: Site Clean-up

Project Date: September 25, 2010

Project Summary: Huntsville Spring Branch has been part of an Environmental Protection Agency ordered Superfund clean-up site at Redstone Arsenal (RSA). Site managers at RSA used Legacy funds to organize a public cleanup of the spring.

A group of 15 volunteers canoed out to the area and remained in water crafts to remove debris weighing a total of 2.5 tons. The hardworking crew all enjoyed themselves. One volunteer commented, "This was a great experience for my family. Tyler [child] has already asked when we are going again!" The efforts of these individuals are one component of the multi-step process to return Huntsville Spring Branch to its natural state.

Contact: Shannon Allen, Ecologist/NEPA Support | (256) 876-3977

Umatilla Chemical Depot | Oregon Natural Resource Project: Native Burrowing Owl Habitat Maintenance

Pollinator Project

Project Date: August 23-26, 2010

Project Summary: Umatilla Chemical Depot is home to a burrowing owl species, whose population is declining throughout northern and eastern portions of its range in the United States and Canada. Volunteers helped enhance this owl's habitat over four consecutive full day work projects. During the morning sessions, site leaders and burrow master volunteers built 28 new burrowing owl nesting sites and maintained 10 previously built nests. During the afternoon, team leaders conducted training sessions on the use of walk-in traps, bow nets, the U.S. Fish & Wildlife Service banding program and habitat assessments for burrowing owls.

During the training sessions, volunteers were given guides that provided practical instructions on how individuals across western North American can build artificial burrows. Volunteers came out to this from several states and Canada including California Idaho, Montana, Nevada, Oregon Washington and British Columbia.

Contact: Donald C. Gillis, Natural and Cultural Resources Programs Manager | (541) 564 5420



Project leader bands burrowing owls.

United States Army/Air National Guard



Arden Hills Army Training Site | Minnesota Natural Resource Project: Native Bird Habitat Maintenance, Harvesting Seed and Invasive Species Removal

Project Date: September 25, 2010

Project Summary: Arden Hills Army Training Site is an area designated as an Important Bird Area and has established nesting sites to improve habitats and increase public awareness of birds that are concerned, threatened or endangered species. For National Public Lands Day, site managers led 45 volunteers for two to three hours on a variety of projects that benefited the Important Bird Area. The group installed two loon nesting platforms, built/installed a lean to shelter, harvested two pounds of seed, cleared away 30 pounds of invasive species and removed 20 pounds of debris.

This project was especially relevant to the 2010 Deepwater Horizon oil spill catastrophe, which impacted the loon's winter nesting grounds. During the projects, site managers relayed the ecological benefits of each task, such as how collecting seed restores the prairie and how loons would be impacted by the oil spill.

Contact: Mary L. Lee, Environmental Protection Specialist | (651) 634-5229



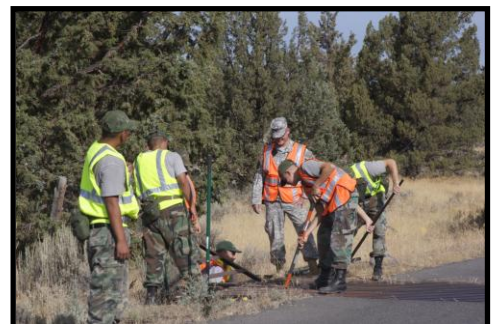
Volunteers of all ages worked to lengthen Camp Dawson's interpretive trail.

Biak Training Center | Oregon Natural Resource Project: Trail and Maintenance, Site Enhancement and Invasive Species Removal

Project Date: September 25, 2010

Project Summary: Site managers from the Biak Training Center were joined by over 140 members of the Oregon Youth Challenge Program for NPLD. The two groups have worked together for the past three years and in 2010, they enhanced five miles of trails, repaired and painted two cattle guards, removed 2,000 pounds of trash and cleared 100 pounds of invasive species.

Contact: James Rejzeck, Training Site Manager | (541) 923-8950



Biak personnel help clean out cattle guards.

Camp Dawson Army Training Site | West Virginia Cultural Resource Project: Interpretive Trail Enhancement

Project Date: September 25, 2010

Project Summary: The Camp Dawson Army Training Site project focused on the continued development of an interpretive trail located near the Volkstone training area. The trail is located in bottomland hardwood forest and showcases some of Volkstone's unique riparian habitats, which includes forested wetlands and emergent wetlands. This year, nine volunteers worked for two hours and added an additional 15 miles of boardwalk, signs, kiosks and wildlife houses to the trail. Maintenance work was also completed on two miles of trail.

Contact: Rick Chaney, Environmental Manager; Mike Plevich, Natural Resource Specialist | (304) 791-4135; (304) 791-4130

Camp McCain Training Center | Mississippi Native Resource Project: Native Species Habitat Maintenance

Project Date: September 25, 2010; December 2010

Project Summary: Camp McCain is located on 13,000 acres. About 12,500 acres of the land are "open" to the public for nature walks, bird watching, recreation, hunting and fishing. Legacy funds were used for planting projects in conjunction with Camp McCain's Beautification Program. This initiative maintains the habitat for a variety of the area's wildlife including turkeys, deer and pollinator species.

In September, wildflowers were added to the area, but the bulk of the work occurred in December, when weather conditions were more conducive to planting. During December, 25 Boy Scouts joined 30 military personnel to plant crop and fruit producing trees such as, pecan, swamp chestnut oaks and persimmon. Volunteers also planted wildflowers and fertilized clover from Camp McCain's 2009 Legacy project. After the work was completed, staff discussed the long term positive impacts of volunteers' work. Boy Scouts also earned merit badge points.

Contact: Major Ron Ford, Director of Plans, Operations, Training and Security | (662) 294-0122

Camp Murray | Washington Natural Resource Project: Invasive Species Remove and Native Vegetation Planting

Project Date: February or March 2011

Project Summary: Camp Murray site managers will host an event to reclaim land from invasive species. The area is infested with many varieties of fast growing non-native vegetation such as, Himalayan blackberry, scotch broom and English ivy. The public will be invited to remove the multitude of invasive species impacting Camp Murray and add native plants to bare areas during February or March 2011. Replanting these sections with native plants will minimize the possibility of re-invasion, improve wildlife habitat and enhance overall aesthetics. The natural vegetation added will also control erosion and subsequent sedimentation of both Murray Creek and American Lake.

Nearby communities in the city of Lakewood and Trout Unlimited volunteers will be invited to this event. This project will showcase the vital role volunteers play in protecting the health of natural resources and the environment in general.

Contact: Rowena Valencia-Gica, Environmental Specialist | (253) 512-8704

Camp Navajo | Arizona

Cultural Resource Project: Pollinator Habitat Maintenance and Signage Installation

Pollinator Project

Project Date: September 25, 2010; October 5-6, 2010.

Project Summary: The Camp Navajo event was held as part of a local Eagle Scout leadership service project. Project managers developed a plan for landscaping the Community Center at Camp Navajo within the cantonment's Historic District. The landscaping project required prep work, including removal of grass and shrubs. This was accomplished by 10 community volunteers on September 25, the weekend prior to the Eagle Scout project.

During the October 5-6 Eagle Scout leadership service project, 36 volunteers planted over 100 native species, laid red landscaping cinder and mulch, added river rock borders and installed signs. The native vegetation added around buildings consisted of various drought tolerant trees and shrubs known to attract pollinators. The volunteers also installed signage by the kiosk and Historic District entrance. Plant identification plaques detailed the species' common and scientific names and also provide information about their habit, water needs, uses for wildlife and ethno-botanical uses. One educational sign also explained the importance of native landscaping, pollinators and water conservation.



Volunteers plant native drought tolerant vegetation.

Contact: Janet Lynn and Bruce Buttrey, Natural Resource Managers | (928) 773-3318; (928) 773-3271

Fort Custer Training Center | Michigan

Natural Resource Project: Tree Planting

Project Date: September 25, 2010

Project Summary: Fort Custer held a tree planting event as part of an urban forestry initiative on September 25. In 10 hours, 12 members of Boy Scout Troop 469 planted 25 deciduous and 15 conifer trees on the Training Center grounds. The added trees will reduce energy consumption by providing cantonment area facilities with wind and/or sun breaks. Base personnel also have a shaded area to relax in during the warm summer months and the trees enhance Fort Custer's aesthetics.

Contact: Jonathan Edgerly, Natural Resource Specialist | (269) 731-6570



Trees are added as part of an urban forestry initiative at Fort Custer.

Fort Indiantown Gap | Pennsylvania Natural Resource Project: Pollinator Habitat Maintenance

Pollinator Project

Project Date: April 2011

Project Summary: In April, Fort Indiantown Gap (FTIG) will have fifty volunteers add native species and mulch around the Range House Museum. FTIG has solicited volunteers from groups they have partnerships with such as the Boy and Girl Scouts, the Milton Hershey School and the Northern Lebanon School District.

The vegetation to be planted is a food and nectar source that will benefit a native butterfly pollinator species—the Regal Fritillary. Fort Indiantown Gap is one of two locations which have this butterfly variety. FTIG staff are growing some of the vegetation that will be planted. Additional native plant varieties established will replace non-native annuals and perennials. Additional service projects will collect the plant's seed and later be grown at Milton Hershey School's Horticultural and Environmental Center. This school will grow the seed at no cost and is located only 15 miles from Fort Indiantown Gap.

The Range House museum project will aesthetically enhance an area along one of the Fort's highly visible streets. The Range honors the history of all units of the Pennsylvania Army and Air National Guard and is visited by many veterans, senior citizens, Girl Scouts, Boy Scouts and school groups. This high traffic section will be landscaped with native vegetation. The native species will beautify a spot the veterans often visit and begin to open up, sharing their stories as Soldiers or Airman. New military personnel also visit the museum to learn about fellow comrades and the history of their branch.

Contact: Rita Meneses, Cultural Resources Manager; Joseph Hovis, Wildlife Program Manager | (717) 861-9415; (717) 861-2806

Fort McClellan | Alabama Natural Resource Project: Establish Outdoor Classroom Trail and Native Species Planting

Project Date: September 23-25, 2010; December 4, 2010; Spring 2011

Project Summary: Fort McClellan Army National Guard Training Center (FM-ARNGTC) celebrated NPLD by holding a service project event for the Boy and Girl Scouts at Camp Willett, otherwise known as Willett Springs, on Pelham Range.

At Willett Springs on September 23 and 24, a floating wooden boardwalk was constructed and installed with volunteers from the FM-ARNG training center. On September 25, the Scouts replaced a small wooden footbridge and constructed a short access trail. Twelve Boy Scouts and their leaders, along with six Girl Scouts and their leaders, worked to construct the bridge, trail and clear a small area beside the spring for planting native perennials. Scouts worked for about eight hours clearing vegetation, hauling gravel, installing landscape timbers and constructing a footbridge. Scouts also assisted staff archaeologists in adding signage with cultural resource information about Willett Springs.

Two additional projects scheduled for September 25 were completed at later dates because necessary trail supplies did not arrive in time. In December, twelve volunteers from a local National Guard unit spent three hours to complete the trail. Weather conditions on September 25 were not conducive for planting so a short work day in early spring is planned when Girl Scouts will return to plant. This event will include an outdoor classroom activity on native vegetation.

Contact: Leah Nerem Storino, Natural Resources Program Manager | (256) 847-4548



Youth volunteers carry materials to the bridge construction area.

Fort Pickett | Virginia Natural Resource Project: Pollinator Habitat Maintenance

Pollinator Project

Project Date: October 15-16, 2010

Project Summary: The Fort Pickett, pollinator garden project occurred on October 14-16 within the Twin Lakes Recreational Area. After this event had received a commitment from a local school, site managers decided to include an educational session in the project. On October 14, Ken Oristaglio, Natural Resources Program Manager for Fort Pickett, spoke to students at Nottoway County Middle School. Mr. Oristaglio discussed the importance of pollinators in the environment, native and non-native species of plants, soils, endangered species and land management practices.

The day before the school group arrived, staff prepared the pollinator site by mowing existing brush and creating a 10 inch layer of soil, composed of vegetative matter and wood chips. The next day, 18 volunteers planted 65 native shrubs at the garden site. After planting the shrubs, students mixed five varieties of native wildflower seed and spread it over 13,000 square feet. All students were given hand lenses, donated by a local consulting company. Students could use these to identify plants and seed in the field, becoming more aware of native species in their community.



Students display a few of the over 50 shrubs they planted.

Contact: Gary L. Williamson, Environmental Program Manager; Ken Oristaglio, Natural Resources Manager | (434) 298-6135; (434) 298-6416

McCrary Training Center | South Carolina Natural Resource Project: Pollinator Habitat Maintenance

Pollinator Project

Project Date: September 25, 2010

Project Summary: McCrary Training Center conducted a pollinator project to benefit the area's bees, bats, butterflies and hummingbirds. Volunteers added native vegetation and wildflowers along two trails. The trails are in a variety of habitats including uplands, wetlands and transition zones. A talk on the importance of these zones and their role in maintaining a healthy ecosystem educated volunteers during the event.

Contact: Daniel Hutto, Environmental Health Manager | (803) 806-2091

State Military Reservation | New Hampshire Natural Resource Project: Trail Construction and Invasive Species Removal

Project Date: September 29-October 1, 2010

Project Summary: Natural resource managers at State Military Reservation worked alongside volunteers to construct a linear trail loop and 50 feet of linear sign path, install 13 sign posts, remove five pounds of weeds and plant native species in the Reservation's Pine Barrens Habitat Restoration Area. These accomplishments will allow visitors to and occupants of the Reservation to learn more about the habitat management on property.

Contact: Kristen L. Melendez, Environmental Compliance Specialist | (603) 227-5124

United States Marine Corps



Marine Corps Air Ground Combat Center, 29 Palms | California Natural Resource Project: Pollinator Habitat Maintenance

Pollinator Project

Project Date: April 18-22, 2011

Project Summary: Marine Corps Air Ground Combat Center will build a Cultural Heritage Interpretive Garden, consisting of native plants. Volunteers from the Center, Boy Scouts of America and local schools have signed on to participate. The garden will be a teaching tool to supplement the already existing Archeology and Paleontology Curation Center and give visitors an opportunity to learn how to identify native plants and how they were used by prehistoric peoples of the Mojave Desert. The native plant garden will also supplement to a nearby existing nectar garden by providing additional food and habitat for pollinator species, like hummingbirds and butterflies.

Contact: Nick Chamberlain, Archeologist and Collections Manager | (760) 830-7650

Marine Corps Air Station Cherry Point | North Carolina Natural Resource Project: Tree Planting

Project Date: September 24, 2010

Project Summary: On September 24, twenty two volunteers participated in the Marine Corps Air Station Cherry Point (MCASCP) tree planting project. Twenty five oak trees were planted within an outfall of the Neuse River, as well as within built-up areas of the installation for aesthetic and quality of life improvements. Additionally, 10 native persimmon trees were planted along adjacent forested areas. Another 10 residual trees were planted within the industrial/cantonment area, along the Neuse River to improve the installation's aesthetics.

Individuals from Williams Farms and Gardens Center participated in this project alongside MCASCP staff in the Point Facilities Department, Environmental Affairs Department, Public Affairs Office and Combat Camera Unit. Before beginning the three hour long planting projects, all volunteers were given a short presentation on proper tree planting techniques and provided with a short memo depicting the importance of live oak trees in the southeast region.

Contact: Carmen Lombardo, Natural Resources Manager | (252) 466-5870



Volunteers gather after successfully planting one of 20 oak trees.

United States Navy



Joint Base Pearl Harbor-Hickam | Hawaii Natural Resource Project: Invasive Species Removal and Native Species Planting

Project Date: September 25, 2010

Project Summary: Twenty two volunteers at Joint Base Pearl Harbor-Hickam removed invasive red mangrove growing along the Base's tidal wetland mudflats. Left untreated, these mangroves form a tall thick forest that chokes out native wetland vegetation and converts the tidal wetlands into unsuitable habitats for many native bird species. Threatened birds in this wetland include the federally endangered Hawaiian stilt, Hawaiian black night heron, Hawaiian moorhen and Hawaiian coot.

An onsite natural resources biologist greeted volunteers and explained the benefits of removing mangroves and the positive impacts for native Hawaiian bird habitats. The volunteer group was smaller than expected due to multiple service projects taking place on the same day. Therefore, an hour and a half into the three hour project, site managers decided it would be more effective for the group to concentrate their efforts on removing invasive mangrove and piling it up for chipping, instead of having one half of the group leave to pull invasive pickleweed. The Ahau Reef pickleweed removal and native planting projects were moved to a winter date.

Project volunteers included active duty Navy and Air Force members, University of Hawaii students, Department of Defense personnel and local residents. Many volunteers, even young children, asked to be contacted about future enhancement projects.

Contact: Patricia Colemon, Navy Natural Resources Program Manager; Joel Helm, Air Force Natural Resources Program Manager | (808) 473-0369; (808) 449-2860

Joint Expeditionary Base Little Creek | Virginia Natural Resource Project: Dune Ecosystem Maintenance

Project Date: November 3-4, 2010

Project Summary: In November, Joint Expeditionary Base Little Creek natural resources staff joined civilian, active and retired duty DoD personnel to enhance the dune ecosystem. The dunes had been destroyed by storms and needed repair. Projects included installing dune fencing and adding native grasses, seed and trees. The trees were added to the installation's Child Development Center. Base personnel taught those at the Child Development Center about the need for trees and delegated the Center to care for the new native vegetation. These projects helped stabilize and restore the dunes to ensure balanced biodiversity.

Contact: Elizabeth Middleton, EIT (contact changes to Sharon Waligora as of January 1, 2011) | (757) 462-8564 x383; (757) 462-8564 x392 (after January 1, 2011)

NASO Dam Neck Annex | Virginia

Natural Resource Project: Dune Enhancement and Stabilization

Project Date: November 5, 2010

Project Summary: NASO Dam Neck Annex site managers partnered with the National Aquarium in Baltimore to complete a variety of dune enhancement and stabilization projects. Over 150 participants hand planted more than 30,000 plants, installed a quarter mile of sand fencing and repaired existing fencing.

The dune enhancement projects will benefit the local ecosystem and military trainings. The dunes are used by a variety of species for food, shelter and water sources. These animals include migratory birds and birds of special concern. Properly managed dunes can also increase nesting grounds for endangered sea turtles. The military will use the refurbished dunes to practice training techniques on unique "natural" landscape. The dunes also separate many of the land based training missions from the ocean tides and winds.

Contact: Ms. Michael F. Wright, Natural Resources Manager | (757) 433-3461

Naval Air Weapons Station China Lake | California

Cultural Resource Project: Fossil Location, Recovery and Recording

Project Date: Spring 2011

Project Summary: Naval Air Weapons Station China Lake (NAWSCL) volunteers will locate, recover and record fossilized Pleistocene era remains. Fossilized remains include those of a mastodon, camel, llama and horse, as well as several species of water fowl. NAWSCL cultural staff and professional paleontologists will accompany volunteers and instruct the group on proper techniques. Participants will be taught how to identify species, properly recover fossils and store the resources without damaging them. Maturango Museum has an existing partnership with NAWSCL and will assist with various educational activities.

This project presents a unique educational opportunity for all volunteers, military personnel and the general public to become more familiar with the installation's cultural resources. The fossil project also provides young adults with an opportunity to gain first hand experience exploring a profession.

Contact: Mike Baskerville, Cultural Program Lead | (760) 939-1350

Naval Air Station Key West | Florida

Natural Resource Project: Butterfly Garden Maintenance and Plant Native Vegetation

Pollinator Project

Project Date: September 25, 2010

Project Summary: At Naval Air Station Key West, volunteers will complete a variety of projects to reclaim an area threatened by invasive plants and exotic trees. To revive this one and a half acre section of coastal habitat, volunteers created an educational park with a butterfly garden, planted approximately 100 trees, added native vegetation and removed debris. Participants were educated on the importance of native vegetation and pollinator species in maintaining a healthy ecosystem.

Contact: Carrie Backlund, Natural Resources Manager | (305) 797-9576

Naval Submarine Base New London | Connecticut Natural Resource Project: Wetland Habitat Restoration

Project Date: November 19, 2010

Project Summary: In November, Naval Submarine Base New London personnel restored a wetland as part of the installation's Integrated Natural Resources Management Plan. Participants added a mix of upland and wetland bird nesting boxes around the wooded margin of wetland. This assisted in transforming the ecosystem from a man-made low wildlife value wetland to a high value wetland. All volunteers were recruited from more than 10,000 active duty personnel on Base.

Contact: Richard Conant, Biologist, Environmental Planner | (860) 694-5649

Naval Support Activity Norfolk Northwest Annex | Virginia Natural Resource Project: Trail Maintenance

Project Date: January or February 2011

Project Summary: At the Naval Support Activity Norfolk Northwest Annex, volunteers will enhance the site's recreation and natural trails. Currently, some individuals using the trail have cut new paths around the broken foot bridges and this has disturbed the surrounding swamp habitat. An estimated 10 to 40 participants will repair or rebuild foot bridges. Volunteers will be given an interactive briefing at the beginning of the day explaining the importance of the swamp habitat and how their efforts preserve the ecosystem and support various military missions.

Contact: Ms. Michael F. Wright, Natural Resources Manager | (757) 433-3461

Naval Weapons Station Yorktown | Virginia Natural Resource Project: Recreation Site Maintenance and Litter Removal

Project Date: Spring 2011

Project Summary: Naval Weapons Stations Yorktown has a variety of recreational opportunities located on the grounds. Volunteers from the installation will repair the recreational fishing and canoe tie-on piers, remove any litter along the nearby shoreline and plant a tree to raise awareness on the importance of native landscaping. These projects will occur on multiple days throughout the spring of 2011.

Contact: John Pulver, Biological Sciences Tech | (757) 636-4447

Naval Weapons Station Seal Beach | California Natural Resource Project: Pollinator Habitat Construction and Invasive Species Removal

Pollinator Project

Project Date: October 16, 2010

Project Summary: Naval Weapons Station Seal Beach and Seal Beach National Wildlife Refuge hosted a volunteer event on October 16 to restore native vegetation along several acres of upper salt marsh and adjacent upland habitat. These upland restoration areas provide habitat and shelter for state and federally-listed endangered bird species, numerous pollinator species and a wide variety of mammals, amphibians, birds and reptiles. They also provide a buffer between wetland habitat and agricultural lands. The Friends of Seal Beach

National Wildlife Refuge assisted with coordinating, planning and implementing this project. Funds from the Legacy program were used to purchase plants, make soil amendments, buy rubbish containers and purchase irrigation supplies.

For about four hours, 70 participants removed three acres of invasive plants, prepared the land for restoration and planted native vegetation. Previously, the restoration areas were covered with non-native plants such as fountain grass, fennel and hottentot fig. Navy volunteers removed these invasive species and soil preparation work was done by the Friends group. Volunteers recruited from the public, including Girl Scouts, Boy Scouts, community groups and California State University Fullerton Biology Students planted 500 native shrubs and flowers in the prepared area.



Interpretive displays, docents, education materials and additional items were on hand to educate volunteers on the ecological benefits of their work. Project leaders provided an introduction explaining the need for wetland habitats and importance of the critical work the Station's volunteers accomplished.

Volunteers plant native shrubs to enhance a wetland habitat.

Contact: Bob Schallmann, Ecologist | (562) 626-7290

Naval Weapons Station Seal Beach Detachment Fallbrook | California Natural Resource Project: Animal Nesting Box Construction

Pollinator Project

Project Date: September 25, 2010

Project Summary: On NPLD, volunteers at Fallbrook Naval Weapons Station constructed animal nesting boxes. Members of the local community and Cub Scouts assisted those at Fallbrook to make 22 wren bird house boxes, 20 large bat condos, and seven smaller bat boxes. Volunteers also partially completed six owl boxes, which were later finished by base employees. A local elementary school assembled an additional 10 bird boxes for the Station as part of their classroom curricula. The students ceremoniously delivered the assembled bat and bird boxes to the Station's conservation program manager during an event featuring animal demonstrations by Project Wildlife at their school. The Scouts that were involved in building bird box kits earned wood working merit badges and helped teach volunteers how to assemble the kits



A volunteer shows off a finished wren bird house box.

The day also involved environmental education during an introduction from Station's conservation program manager. Throughout the day volunteers could also visit an information table with fliers, quiz puzzles, patches and bat rings.

The work done on this NPLD provided: better habitats for bat species, some of which currently reside in undesirable areas within buildings; more appropriate locations for nesting birds in and around areas where few suitable sites exist; and safer habitats for barn owls.

Contact: Christy Wolf, Conservation Program Manager | (760) 731-3425

NIOC Sugar Grove | West Virginia

Natural Resource Project: Pollinator Habitat Enhancement and Invasive Species Removal

Pollinator Project

Project Date: October 20, 2010 and October 22, 2010

Project Summary: Over two days, volunteers at NIOC Sugar Grove enhanced a pollinator habitat and removed invasive species. The pollinator project is part of an active recovery program to preserve and reintroduce native pollinators, such as butterflies, bees and other insects. The federally endangered Shale barren rock-cress's survival is highly dependent upon pollinators.

On day one, seven volunteers planted five wildflower species (500 individual plants) that are native to the shale barren. Species included, Canada cinquefoil, bird's-foot violet, strawberry and rock cress.

A larger group of twenty five volunteers removed invasive species on the second day. Prior to the weeding, site managers discussed the need for removing invasive species and reintroducing native species. After the talks volunteers went to a section near a natural drainage area and removed invasive plants such as tartarian honeysuckle, rambler rose and garlic mustard.

Each project took approximately four hours. The events had volunteers from the West Virginia Department of Natural Resources; The Nature Conservancy, US Fish and Wildlife Service, US Naval Facility Engineering Command, Atlantic Division, Potomac Highlands Cooperative Weed Pest Management Area and Friends of Beautiful Pendleton County.

Contact: Steven W. Niethamer, Installation Environmental Program Manager | (304) 249-6341